



HY56 SERIES

Low Bake Hybrid Powder Coating



Product Data

The Hybrid Low Bake series uses an epoxy / polyester formulation that offers coatings with superior properties for mainly interior applications.

These properties include:

- Improved UV resistance to that of pure epoxy powder coatings
- Fast cure
- Low temperature cure
- Retaining good flow at low temperature cure
- Full range of colours and gloss levels
- High gloss levels achievable
- Reduced yellowing on over bake when compared to stand epoxy powders and to some earlier so-called "fast cure hybrids".

Uses

The Hybrid Low Bake series is suitable for mainly interior applications or light duty exterior areas such as:

- Whiteware goods
- Cookware
- Heater panels
- Indoor furniture
- Bathroom fittings
- Metal cabinets

The main advantage is where the coater wants to save energy costs, or when the substrate requires a lower curing temperature because of its composition e.g. some soldered items.

Colour Availability

Wide range of colours available, including clean, white shades. Minimum run of nominal 8kg.

Specific Gravity

1.2 to 1.8, dependent on colour

Pre-treatment

CRS:	Zinc or iron phosphate
Zinc Coated Steels:	Zinc phosphate or chromate conversion
Aluminium Alloys:	Chromate conversion

Application

The Hybrid Low Bake series is suitable for Corona Electrostatic spray equipment.

Fluidised methods can be used.

For information regarding tribostatic application, please contact your local PPG Envirocron Technical Sales Representative.

Curing

10 mins @ 160 deg C Peak Metal temperature (PMT).

NOTE: Higher temperatures at shorter cure schedules are achievable, but consultation with PPG Envirocron Technical Services should be made.

Film Properties

The recommended thickness for the cured powder film is 60 – 90 microns. It is not advised to go below film thickness of 50 microns or exceed 120 microns.

Mechanical tests carried out on lightweight, zinc phosphate pre-treated panels with 60 micron (DFT) finish film.

Mechanical

Flexibility (conical mandrill) ASTM D522: Pass 3mm

Adhesion (2mm crosshatch) BS3900-E6: Pass GTO

Pencil Hardness: F – H

Impact Resistance BS3900-E3: 80 inch.lb 2.5mm Pass

Chemical & Solvent Resistance

Generally good resistance to acids, alkalis, oil and most solvents at normal temperatures.

Substrates

Cold rolled mild steel (CRS)

Zinc coated steels

Aluminium alloys

Exterior Durability

Direct UV exposure will result in some chalking and loss of gloss after 3-6 months, however UV light filtered by glass does not affect chalking.

For continuous exposure to weather it is recommended that PPG Envirocron polyesters be used.

Storage and Packaging

Packaging: Cardboard boxes – 20kg. Bulk packs available to suit your requirements.

Shelf Life: 12 months minimum @ <30° C/dry. All bags must be sealed before storage.

Store in a cool, dry area.

Health & Safety

PPG Envirocron powder coatings can generally be regarded as inherently non-toxic.

Powder on the skin should be washed off using soap and water. Powder in the eyes should be washed out with water for 15 minutes.

Avoid breathing airborne dusts: wear an approved dust mask.

Ovens should be exhausted to atmosphere.

Users should refer to "Code of Safe Practice" as supplied by Paint Makers' Association (UK) and NZ Department of Labour.

For further information, refer to the Material Safety Data Sheet for this product.

CAUTION:

Improper use and handling of this product can be hazardous to health.

This product is to be used by those knowledgeable about proper application methods. PPG Industries makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which PPG Industries is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

This product is for professional use only. Not for residential use.

Technical information given verbally or in writing is based on knowledge and research, given in good faith and believed to be reliable, but no guarantee of accuracy is made or implied. Since methods and conditions of use are beyond our control, all merchandise is sold and received subject to the condition that our liability whether express or implied for any defect in quality, or for any lack of fitness for the specified use thereof, is limited to the return of the purchase price if written claim is made within 14 days from date of delivery. It is recommended that the user makes his or her own tests to determine the suitability of the product for his own requirements. Freedom from patent restrictions is not implied.

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